PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER		, , , , , , , , , , , , , , , , , , ,
G2728 PCT	ACTION	as well	see Form PCT/ISA/220 l as, where applicable, item 5 below.
International application No.	International filing date (day/mon	th/year)	(Earliest) Priority Date (day/month/year)
PCT/EP2004/011646	15/10/2004	Ŀ	16/10/2003
Applicant			
MICROMET AG			
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Sea ansmitted to the International Burea	arching Auth a.	nority and is transmitted to the applicant
This International Search Report consists	of a total ofsh	eets.	·
X It is also accompanied by	a copy of each prior art document	cited in this	report.
Basis of the report			
	international search was carried ou ess otherwise indicated under this		sis of the international application in the
The international this Authority (Rul		of a transl	ation of the international application furnished to
b. X With regard to any nucleo	otide and/or amino acid sequenc	disclosed	in the international application, see Box No. I.
2. X Certain claims were four	nd unsearchable (See Box II).		
3. Unity of invention is lack	king (see Box III).		
4. With regard to the title ,			
X the text is approved as sui	bmitted by the applicant.		
the text has been establish	hed by this Authority to read as follo	ows:	
•			·
		•	
5. With regard to the abstract,			
X the text is approved as sul	• • • •	hin Arribanii	h, an it annears in Day No. IV. The applicant
may, within one month from	m the date of mailing of this interna	nis Authori itional searc	ty as it appears in Box No. IV. The applicant ch report, submit comments to this Authority.
6. With regard to the drawings,			
a. the figure of the drawings to be p	ublished with the abstract is Figure	No	
as suggested by the	ne applicant.		
as selected by this	s Authority, because the applicant f	ailed to sug	gest a figure.
'	s Authority, because this figure bett	er characte	erizes the invention.
b. X none of the figures is to be	e published with the abstract.		

International application No.

PCT/EP2004/011646

Вох	No. I	Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)
1.	With	regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed nation, the international search was carried out on the basis of:
	a.	type of material X a sequence listing table(s) related to the sequence listing
	b.	format of material X in written format in computer readable form
	c.	time of filing/furnishing X contained in the international application as filed X filed together with the international application in computer readable form furnished subsequently to this Authority for the purpose of search
2.		In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3.	Additi	ional comments:

International Application No PCT/EP2004/011646

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K16/28 A61K39/395 C12N15/13

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 CO7K C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, MEDLINE, BIOSIS, CHEM ABS Data, EMBASE

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Υ	WO 99/54440 A (DOERKEN, BERND; RIETHMUELLER, GERT; KUFER, PETER; LUTTERBUESE, RALF; B) 28 October 1999 (1999-10-28) cited in the application abstract; claims 1-32	1-41
Y	EP 0 620 276 A (CELLTECH LIMITED) 19 October 1994 (1994-10-19) page 3, line 29 - line 45 page 4, line 49 - line 56 table 2 figure 5 SEQ ID NO:22	1-41

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed	 *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family
Date of the actual completion of the international search 4 February 2005	Date of mailing of the international search report 21/02/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Mandl, B

1

international Application No
PCT/EP2004/011646

		PCI/EP20	04/011646
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		Tour war with No
Category °	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
A	MALETZ K ET AL: "Bispecific single-chain antibodies as effective tools for eliminating epithelial cancer cells from human stem cell preparations by redirected cell cytotoxicity" INTERNATIONAL JOURNAL OF CANCER, vol. 93, no. 3, 1 August 2001 (2001-08-01), pages 409-416, XP002301955 ISSN: 0020-7136 page 409, right-hand column, paragraph 2	\checkmark	1-41
A	US 6 491 916 B1 (BLUESTONE JEFFREY A ET AL) 10 December 2002 (2002-12-10) column 2, last paragraph column 3, line 66 - column 4, line 1 column 8, line 47 - column 9, line 21	J	1-41
A	WO 02/066514 A (MERCK PATENT GMBH; GILLIES, STEPHEN; CARR, FRANCIS, J; JONES, TIM; CAR) 29 August 2002 (2002-08-29) page 5, line 27 - page 6, line 31 page 65, line 1 - page 70, line 7 page 71, line 23 - line 32 page 72, line 18 - page 74, line 9	. V	1-41
P,A	US 2004/162411 A1 (LANZAVECCHIA ANTONIO) 19 August 2004 (2004-08-19) the whole document	V	1-41
	•		
-			
.			
			1

1

International application No. PCT/EP2004/011646

INTERNATIONAL SEARCH REPORT

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 37-40 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
•
Remark on Protest The additional search fees were accompanied by the applicant's protest.
No protest accompanied the payment of additional search fees.

Information on patent family members

International Application No
PCT/EP2004/011646

				101/21/2004/011040			
	Patent document cited in search report		Publication date		Patent family member(s)	Publication date	
	WO 9954440	Α	28-10-1999	AT	244758 T	15-07-2003	
	WU 99344U	^	20 10 1999	ΑŬ	761587 B2	05-06-2003	
]				AU	4135299 A	08-11-1999	
				BG	104868 A	28-09-2001	
				BR	9909860 A	19-12-2000	
				CA	2326389 A1	28-10-1999	
				CN	1299410 T	13-06-2001	
				DE	69909459 D1	14-08-2003	
				DE	69909459 T2	27-05-2004	
				DK	1071752 T3	20-10-2003	
į				WO	9954440 A1	28-10-1999	
				EP	1348715 A2	01-10-2003	
				EP	1071752 A1	31-01-2001	
				ES.	2203141 T3	01-04-2004	
İ				HR	20000714 A1	31-12-2001	
				HU	0102535 A2	28-10-2001	
				ID	27512 A	12-04-2001	
				ĴΡ	2002512020 T	23-04-2002	
				NO	20005296 A	13-12-2000	
				NZ	507381 A	19-12-2003	
				PL	344016 A1	24-09-2001	
				PT	1071752 T	28-11-2003	
				RU	2228202 C2	10-05-2004	
				SI	1071752 T1	31-12-2003	
				SK	15792000 A3	10-05-2001	
ŀ				TR	200003087 T2	21-02-2001	
				ZA	200005866 A	18-04-2001	
	EP 0620276	 А	19-10-1994	EP	0620276 A1	19-10-1994	
	EF 0020270	. ^	19-10-1994	EP	0626390 A1	30-11-1994	
				AT	129017 T	15-10-1995	
				ΑŤ	124459 T	15-07-1995	
				ΑŤ	159299 T	15-11-1997	
				ΑŤ	208794 T	15-11-2001	
				ΑÜ	664801 B2	30-11-1995	
				ΑÜ	6461294 A	22-12-1994	
				ΑÜ	646009 B2	03-02-1994	
				AU	6974091 A	24-07-1991	
		•	•	AU	649645 B2	02-06-1994	
				ΑU	7033091 A	24-07-1991	
				ΑU	631481 B2	26-11-1992	
				AU	7048691 A	24-07-1991	
				BG	60462 B1	28-04-1995	
				BR	9007197 A	28-01-1992	
				CA	2037607 A1	07-09-1992	
				CA	2046904 A1	22-06-1991	
				CA	2050479 A1	22-06-1991	
	•			DE	69020544 D1	03-08-1995	
				DE	69020544 T2	18-01-1996	
				DE	69022982 D1	16-11-1995	
				DE DE	69022982 T2 69031591 D1	28-03-1996 20-11-1997	
				DE	69031591 DI 69031591 T2	12-03-1998	
				DE	69031591 12 69033857 D1	20-12-2001	
				DE	69033857 DI 69033857 T2	12-09-2002	
1				DK	460167 T3	20-11-1995	
				DK	460167 T3 460171 T3	28-08-1995	
				DK	460171 T3 460178 T3	22-12-1997	
1				DK	7001/0 13	CE 1E 1991	

Information on patent family members

International Application No
PCT/EP2004/011646

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0620276			DK	626390 T3	11-03-2002
LI 0020270	, ,		EP	0460167 A1	11-12-1991
			ĒΡ	0460171 A1	11-12-1991
			ĒΡ	0460178 A1	11-12-1991
			ËS	2079638 T3	16-01-1996
			ĒŠ	2074701 T3	16-09-1995
			ES	2112270 T3	01-04-1998
			ĒŠ	2165864 T3	01-04-2002
			FI	108777 B1	28-03-2002
			FΪ	108776 B1	28-03-2002
			FΪ	108917 B1	30-04-2002
			FΪ	990875 A	19-04-1999
			WÔ	9109966 A1	11-07-1991
			WO	9109967 A1	11-07-1991
			WO	9109968 A1	11-07-1991
			GB	2246781 A ,	
			GB	2246570 A ,	B 05-02-1992
			GB	2268744 A ,	
			GB	2268745 A ,	
			GR	3017734 T3	31-01-1996
US 6491916	 В1	10-12-2002	US	2003108548 A1	12-06-2003
			ΑU	7098094 A	20-12-1994
			DE	69431797 D1	09-01-2003
			DE	69431797 T2	14-08-2003
			EΡ	0700402 A1	13-03-1996
			JP	9501824 T	25-02-1997
WO 02066514	Α	29-08-2002	BR	0207267 A	10-02-2004
			CA	2438628 A1	29-08-2002
			WO	02066514 A2	29-08-2002
			EP	1361891 A2	19-11-2003
			HU	0303171 A2	29-12-2003
			JP	2004532620 T	28-10-2004
			MX	PA03007323 A	12-12-2003
			PL	362324 A1	18-10-2004
	•		US	2004082039 A1	29-04-2004
			ZA	200307323 A	06-07-2004
US 2004162411	A1	19-08-2004	CA	2403313 A1	11-04-2004